

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: EPHESUS

Report Number: P624201

Luminaire Tested: **EPH-VN-07-E-750-U-77**

Issue Date: 11/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P624201  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 11/2/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-07-E-750-U-77  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
Nema 7 distribution lens  
Light Source: (112) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

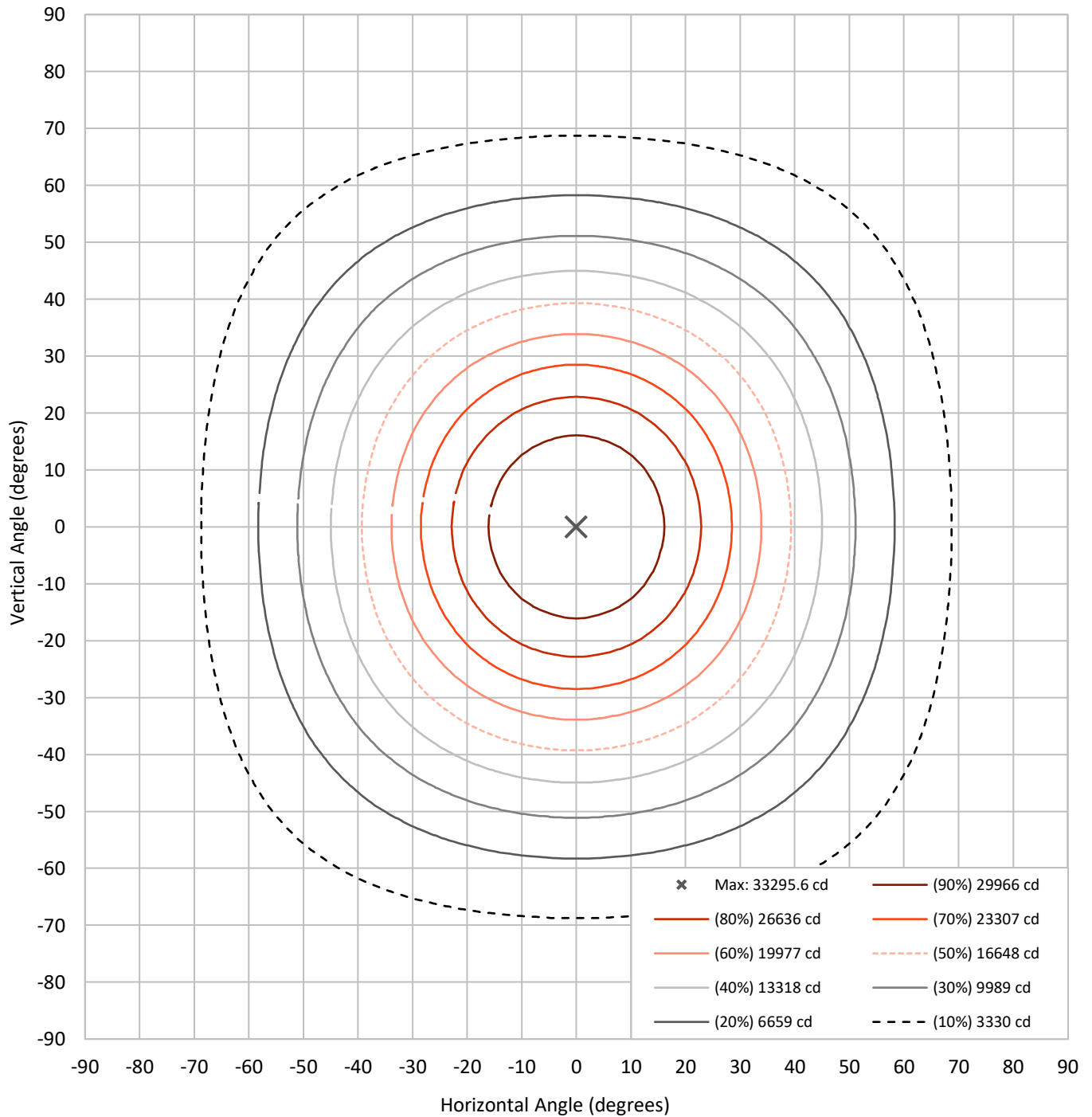
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	59949.4 lumens	Max Intensity:	33295.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	112.5 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	25939.5 lumens	Field Lumens:	42475.1 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

Input Watts (W): 532.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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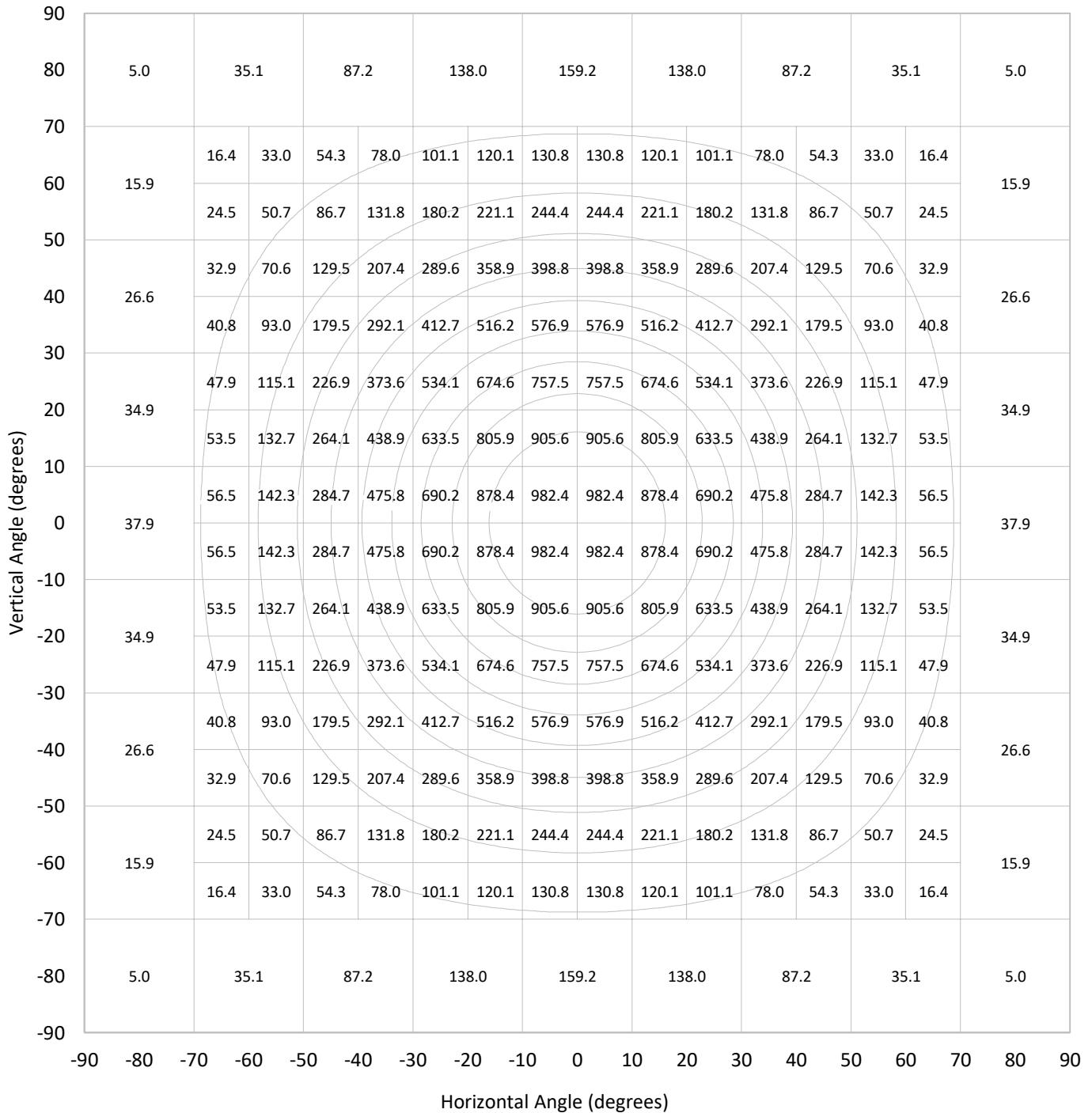
### Iso-Candela Plot





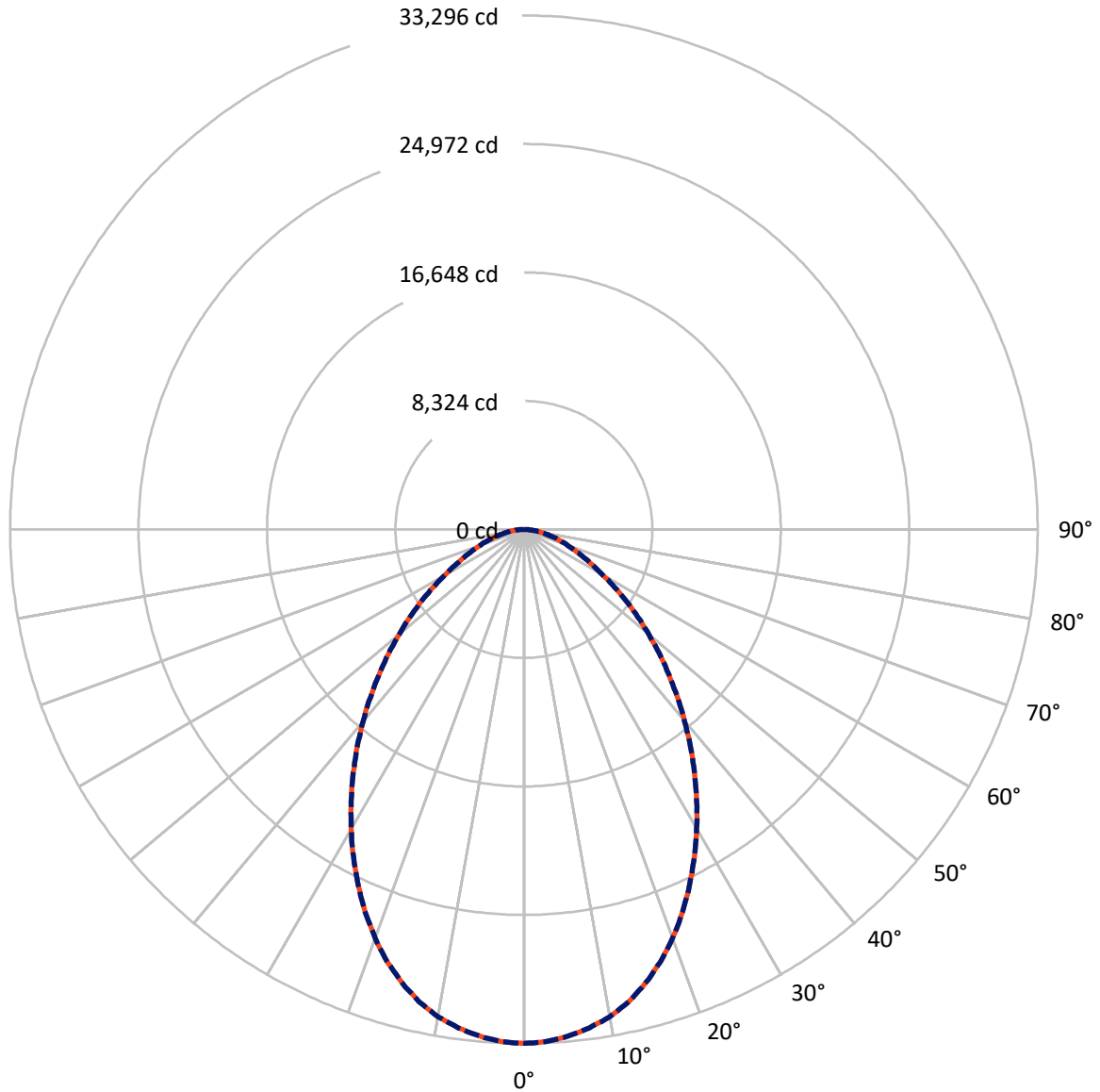
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### Lumen Table



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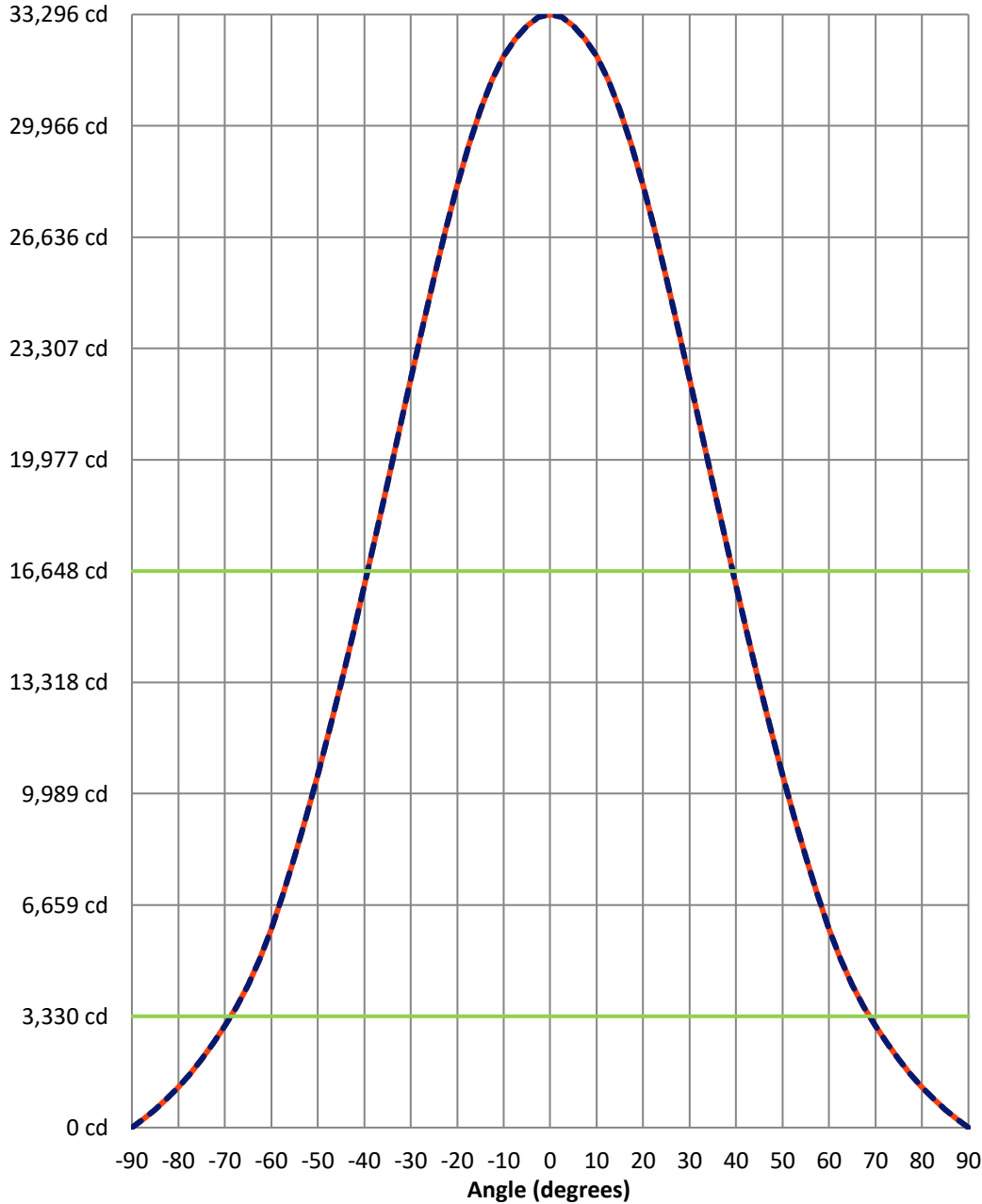
### Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg      - - - Horizontal Distribution Through 0-Deg

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### Luminous Intensity Plot



**Beam:**  
 H Angle: 78.6°  
 V Angle: 78.6°  
 Lumens: 25939.5  
 Efficiency: 43.3%

**Field:**  
 H Angle: 137.5°  
 V Angle: 137.5°  
 Lumens: 42475.1  
 Efficiency: 70.9%

**Spill:**  
 Lumens: 17474.3  
 Efficiency: 29.1%

— Vertical Distribution through 0-Deg  
 - - - Horizontal Distribution through 0-Deg



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FIELD  
 BEAM

**CANDELA DISTRIBUTION:**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	256.3	256.3	256.3	256.3	256.3	256.3	256.3	243.8	243.8	237.5	231.3
85°	537.5	537.5	537.5	537.5	537.5	525.0	518.8	512.5	506.3	493.8	487.5
82.5°	862.5	862.5	862.5	862.5	850.0	837.5	831.3	818.8	806.3	787.5	768.8
80°	1206.3	1206.3	1206.3	1206.3	1187.6	1175.1	1156.3	1143.8	1125.1	1100.1	1075.1
77.5°	1600.1	1600.1	1600.1	1581.3	1568.8	1550.1	1531.3	1506.3	1481.3	1450.1	1412.6
75°	2043.9	2043.9	2043.9	2018.9	2000.1	1981.4	1950.1	1918.9	1881.4	1837.6	1787.6
72.5°	2525.1	2525.1	2525.1	2493.9	2475.1	2443.9	2406.4	2362.6	2318.9	2262.6	2200.1
70°	3043.9	3043.9	3043.9	3006.4	2975.2	2943.9	2893.9	2843.9	2781.4	2718.9	2643.9
67.5°	3606.4	3606.4	3606.4	3562.7	3525.2	3481.4	3425.2	3362.7	3287.7	3200.2	3112.7
65°	4262.7	4262.7	4237.7	4200.2	4156.5	4094.0	4025.2	3937.7	3844.0	3731.5	3612.7
62.5°	5037.8	5037.8	5000.3	4956.5	4900.3	4819.0	4725.3	4612.8	4481.5	4337.7	4194.0
60°	5937.8	5937.8	5894.1	5837.8	5756.6	5656.6	5531.6	5387.8	5225.3	5044.0	4869.0
57.5°	6975.4	6975.4	6919.1	6844.1	6744.1	6619.1	6462.9	6281.6	6075.3	5850.3	5631.6
55°	8100.4	8100.4	8031.7	7944.2	7825.4	7675.4	7487.9	7275.4	7025.4	6769.1	6487.9
52.5°	9294.3	9294.3	9213.0	9113.0	8975.5	8800.5	8588.0	8338.0	8050.4	7750.4	7419.2
50°	10550.6	10550.6	10456.8	10344.3	10188.1	9981.8	9738.0	9450.5	9131.8	8781.7	8400.5
47.5°	11894.4	11894.4	11788.1	11656.9	11469.4	11231.9	10944.4	10613.1	10250.6	9856.8	9425.5
45°	13275.7	13275.7	13157.0	13007.0	12800.7	12531.9	12213.2	11894.4	11431.9	10975.6	10475.6
42.5°	14713.3	14713.3	14575.8	14407.0	14169.5	13875.8	13513.2	13100.7	12644.4	12131.9	11588.1
40°	16207.1	16207.1	16050.9	15857.1	15594.6	15257.1	14850.8	14388.3	13875.8	13307.0	12706.9
37.5°	17732.2	17732.2	17557.2	17344.7	17050.9	16675.9	16219.6	15707.1	15132.1	14500.8	13838.3
35°	19269.8	19269.8	19076.0	18844.8	18519.8	18107.2	17613.5	17044.7	16407.2	15719.6	14975.8
32.5°	20838.6	20838.6	20626.1	20363.6	19994.8	19538.6	18994.8	18376.0	17732.2	16932.2	16119.6
30°	22388.7	22388.7	22157.5	21870.0	21476.2	20976.2	20382.4	19701.1	18944.8	18126.0	17250.9
27.5°	23913.8	23851.3	23657.5	23351.3	22920.0	22388.7	21744.9	21007.4	20188.6	19288.6	18351.0
25°	25413.9	25345.1	25132.6	24795.1	24332.6	23751.3	23057.5	22270.0	21388.7	20438.6	19413.6
22.5°	26851.5	26776.5	26551.5	26188.9	25695.2	25063.9	24320.1	23476.3	22538.7	21519.9	20438.6
20°	28182.8	28101.5	27870.3	27489.0	26976.5	26307.7	25520.2	24613.9	23613.8	22538.7	21388.7
17.5°	29382.9	29301.6	29057.8	28664.1	28182.8	27439.0	26626.5	25670.2	24613.9	23476.3	22270.0
15°	30439.2	30351.7	30101.7	29707.9	29157.9	28457.8	27601.5	26626.5	25520.2	24320.1	23057.5
12.5°	31339.2	31251.7	30995.5	30601.7	30032.9	29332.9	28457.8	27439.0	26307.7	25063.9	23751.3
10°	32051.8	31964.3	31720.5	31345.5	30757.9	30032.9	29157.9	28182.8	26976.5	25695.2	24332.6
7.5°	32564.3	32483.0	32258.0	31883.0	31345.5	30601.7	29707.9	28664.1	27489.0	26188.9	24795.1
5°	32951.8	32858.1	32633.0	32258.0	31720.5	30995.5	30101.7	29057.8	27870.3	26551.5	25132.6
2.5°	33220.6	33108.1	32858.1	32483.0	31964.3	31251.7	30351.7	29301.6	28101.5	26776.5	25345.1
0°	33295.6	33220.6	32951.8	32564.3	32051.8	31339.2	30439.2	29382.9	28182.8	26851.5	25413.9



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**CANDELA DISTRIBUTION (continued):**

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	225.0	225.0	218.8	212.5	206.3	193.8	187.5	181.3	175.0	162.5	156.3
85°	475.0	462.5	450.0	437.5	418.8	406.3	387.5	375.0	356.3	337.5	318.8
82.5°	750.0	731.3	706.3	687.5	662.5	631.3	606.3	575.0	543.8	518.8	487.5
80°	1050.1	1018.8	987.6	956.3	918.8	881.3	843.8	806.3	762.5	718.8	675.0
77.5°	1375.1	1331.3	1287.6	1237.6	1193.8	1143.8	1093.8	1043.8	987.6	931.3	875.0
75°	1737.6	1681.3	1618.8	1556.3	1500.1	1431.3	1362.6	1293.8	1218.8	1150.1	1075.1
72.5°	2131.4	2062.6	1987.6	1912.6	1831.4	1743.8	1656.3	1562.6	1475.1	1387.6	1293.8
70°	2556.4	2475.1	2381.4	2287.6	2187.6	2081.4	1975.1	1862.6	1750.1	1637.6	1525.1
67.5°	3012.7	2912.7	2800.2	2687.6	2562.6	2437.6	2312.6	2181.4	2043.9	1906.4	1775.1
65°	3500.2	3375.2	3243.9	3100.2	2956.4	2812.7	2662.6	2506.4	2350.1	2187.6	2043.9
62.5°	4044.0	3887.7	3719.0	3543.9	3381.4	3206.4	3043.9	2850.2	2662.6	2481.4	2300.1
60°	4675.3	4469.0	4262.7	4044.0	3837.7	3612.7	3412.7	3200.2	2987.7	2781.4	2568.9
57.5°	5381.5	5119.0	4869.0	4606.5	4331.5	4081.5	3825.2	3568.9	3331.4	3087.7	2856.4
55°	6181.6	5862.8	5550.3	5225.3	4906.5	4594.0	4269.0	3981.5	3687.7	3412.7	3143.9
52.5°	7056.6	6694.1	6306.6	5937.8	5531.6	5144.0	4781.5	4419.0	4075.2	3744.0	3437.7
50°	7994.2	7569.2	7125.4	6675.4	6212.8	5756.6	5319.0	4894.0	4494.0	4106.5	3744.0
47.5°	8969.2	8488.0	7981.7	7469.2	6975.4	6419.1	5894.1	5412.8	4931.5	4494.0	4075.2
45°	9969.3	9425.5	8869.2	8288.0	7706.7	7106.6	6525.4	5937.8	5412.8	4894.0	4419.0
42.5°	11000.6	10388.1	9769.3	9125.5	8481.7	7825.4	7169.1	6525.4	5894.1	5319.0	4781.5
40°	12063.2	11388.1	10681.8	9981.8	9294.3	8544.2	7825.4	7106.6	6419.1	5756.6	5144.0
37.5°	13125.7	12388.2	11625.6	10838.1	10050.6	9294.3	8481.7	7706.7	6975.4	6212.8	5531.6
35°	14194.5	13382.0	12556.9	11700.6	10838.1	9981.8	9125.5	8288.0	7469.2	6675.4	5937.8
32.5°	15269.6	14382.0	13469.5	12556.9	11625.6	10681.8	9769.3	8869.2	7981.7	7125.4	6306.6
30°	16325.9	15363.3	14382.0	13382.0	12388.2	11388.1	10388.1	9425.5	8488.0	7569.2	6694.1
27.5°	17357.2	16325.9	15269.6	14194.5	13125.7	12063.2	11000.6	9969.3	8969.2	7994.2	7056.6
25°	18351.0	17250.9	16119.6	14975.8	13838.3	12706.9	11588.1	10475.6	9425.5	8400.5	7419.2
22.5°	19288.6	18126.0	16932.2	15719.6	14500.8	13307.0	12131.9	10975.6	9856.8	8781.7	7750.4
20°	20188.6	18944.8	17732.2	16407.2	15132.1	13875.8	12644.4	11431.9	10250.6	9131.8	8050.4
17.5°	21007.4	19701.1	18376.0	17044.7	15707.1	14388.3	13100.7	11894.4	10613.1	9450.5	8338.0
15°	21744.9	20382.4	18994.8	17613.5	16219.6	14850.8	13513.2	12213.2	10944.4	9738.0	8588.0
12.5°	22388.7	20976.2	19538.6	18107.2	16675.9	15257.1	13875.8	12531.9	11231.9	9981.8	8800.5
10°	22920.0	21476.2	19994.8	18519.8	17050.9	15594.6	14169.5	12800.7	11469.4	10188.1	8975.5
7.5°	23351.3	21870.0	20363.6	18844.8	17344.7	15857.1	14407.0	13007.0	11656.9	10344.3	9113.0
5°	23657.5	22157.5	20626.1	19076.0	17557.2	16050.9	14575.8	13157.0	11788.1	10456.8	9213.0
2.5°	23851.3	22388.7	20838.6	19269.8	17732.2	16207.1	14713.3	13275.7	11894.4	10550.6	9294.3
0°	23913.8	22388.7	20838.6	19269.8	17732.2	16207.1	14713.3	13275.7	11894.4	10550.6	9294.3





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**CANDELA DISTRIBUTION (continued):**

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	150.0	137.5	125.0	118.8	106.3	100.0	87.5	75.0	68.8	56.3	43.8
85°	300.0	275.0	256.3	237.5	218.8	193.8	175.0	156.3	131.3	112.5	87.5
82.5°	456.3	425.0	393.8	362.5	331.3	300.0	262.5	231.3	200.0	168.8	131.3
80°	631.3	581.3	537.5	493.8	450.0	406.3	356.3	312.5	262.5	218.8	175.0
77.5°	812.5	756.3	693.8	631.3	568.8	512.5	450.0	393.8	337.5	275.0	218.8
75°	1006.3	931.3	862.5	781.3	706.3	625.0	550.0	475.0	406.3	337.5	262.5
72.5°	1206.3	1112.6	1018.8	931.3	837.5	743.8	656.3	562.5	475.0	393.8	312.5
70°	1412.6	1300.1	1187.6	1081.3	975.1	862.5	762.5	656.3	550.0	450.0	356.3
67.5°	1631.3	1500.1	1368.8	1231.3	1112.6	987.6	862.5	743.8	625.0	512.5	406.3
65°	1868.9	1712.6	1550.1	1406.3	1250.1	1112.6	975.1	837.5	706.3	568.8	450.0
62.5°	2112.6	1931.4	1750.1	1568.8	1406.3	1231.3	1081.3	931.3	781.3	631.3	493.8
60°	2362.6	2156.4	1950.1	1750.1	1550.1	1368.8	1187.6	1018.8	862.5	693.8	537.5
57.5°	2618.9	2387.6	2156.4	1931.4	1712.6	1500.1	1300.1	1112.6	931.3	756.3	581.3
55°	2881.4	2618.9	2362.6	2112.6	1868.9	1631.3	1412.6	1206.3	1006.3	812.5	631.3
52.5°	3143.9	2856.4	2568.9	2300.1	2043.9	1775.1	1525.1	1293.8	1075.1	875.0	675.0
50°	3412.7	3087.7	2781.4	2481.4	2187.6	1906.4	1637.6	1387.6	1150.1	931.3	718.8
47.5°	3687.7	3331.4	2987.7	2662.6	2350.1	2043.9	1750.1	1475.1	1218.8	987.6	762.5
45°	3981.5	3568.9	3200.2	2850.2	2506.4	2181.4	1862.6	1562.6	1293.8	1043.8	806.3
42.5°	4269.0	3825.2	3412.7	3043.9	2662.6	2312.6	1975.1	1656.3	1362.6	1093.8	843.8
40°	4594.0	4081.5	3612.7	3206.4	2812.7	2437.6	2081.4	1743.8	1431.3	1143.8	881.3
37.5°	4906.5	4331.5	3837.7	3381.4	2956.4	2562.6	2187.6	1831.4	1500.1	1193.8	918.8
35°	5225.3	4606.5	4044.0	3543.9	3100.2	2687.6	2287.6	1912.6	1556.3	1237.6	956.3
32.5°	5550.3	4869.0	4262.7	3719.0	3243.9	2800.2	2381.4	1987.6	1618.8	1287.6	987.6
30°	5862.8	5119.0	4469.0	3887.7	3375.2	2912.7	2475.1	2062.6	1681.3	1331.3	1018.8
27.5°	6181.6	5381.5	4675.3	4044.0	3500.2	3012.7	2556.4	2131.4	1737.6	1375.1	1050.1
25°	6487.9	5631.6	4869.0	4194.0	3612.7	3112.7	2643.9	2200.1	1787.6	1412.6	1075.1
22.5°	6769.1	5850.3	5044.0	4337.7	3731.5	3200.2	2718.9	2262.6	1837.6	1450.1	1100.1
20°	7025.4	6075.3	5225.3	4481.5	3844.0	3287.7	2781.4	2318.9	1881.4	1481.3	1125.1
17.5°	7275.4	6281.6	5387.8	4612.8	3937.7	3362.7	2843.9	2362.6	1918.9	1506.3	1143.8
15°	7487.9	6462.9	5531.6	4725.3	4025.2	3425.2	2893.9	2406.4	1950.1	1531.3	1156.3
12.5°	7675.4	6619.1	5656.6	4819.0	4094.0	3481.4	2943.9	2443.9	1981.4	1550.1	1175.1
10°	7825.4	6744.1	5756.6	4900.3	4156.5	3525.2	2975.2	2475.1	2000.1	1568.8	1187.6
7.5°	7944.2	6844.1	5837.8	4956.5	4200.2	3562.7	3006.4	2493.9	2018.9	1581.3	1206.3
5°	8031.7	6919.1	5894.1	5000.3	4237.7	3606.4	3043.9	2525.1	2043.9	1600.1	1206.3
2.5°	8100.4	6975.4	5937.8	5037.8	4262.7	3606.4	3043.9	2525.1	2043.9	1600.1	1206.3
0°	8100.4	6975.4	5937.8	5037.8	4262.7	3606.4	3043.9	2525.1	2043.9	1600.1	1206.3



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**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	31.3	25.0	12.5	0.0
85°	68.8	43.8	25.0	0.0
82.5°	100.0	68.8	31.3	0.0
80°	131.3	87.5	43.8	0.0
77.5°	168.8	112.5	56.3	0.0
75°	200.0	131.3	68.8	0.0
72.5°	231.3	156.3	75.0	0.0
70°	262.5	175.0	87.5	0.0
67.5°	300.0	193.8	100.0	0.0
65°	331.3	218.8	106.3	0.0
62.5°	362.5	237.5	118.8	0.0
60°	393.8	256.3	125.0	0.0
57.5°	425.0	275.0	137.5	0.0
55°	456.3	300.0	150.0	0.0
52.5°	487.5	318.8	156.3	0.0
50°	518.8	337.5	162.5	0.0
47.5°	543.8	356.3	175.0	0.0
45°	575.0	375.0	181.3	0.0
42.5°	606.3	387.5	187.5	0.0
40°	631.3	406.3	193.8	0.0
37.5°	662.5	418.8	206.3	0.0
35°	687.5	437.5	212.5	0.0
32.5°	706.3	450.0	218.8	0.0
30°	731.3	462.5	225.0	0.0
27.5°	750.0	475.0	225.0	0.0
25°	768.8	487.5	231.3	0.0
22.5°	787.5	493.8	237.5	0.0
20°	806.3	506.3	243.8	0.0
17.5°	818.8	512.5	243.8	0.0
15°	831.3	518.8	256.3	0.0
12.5°	837.5	525.0	256.3	0.0
10°	850.0	537.5	256.3	0.0
7.5°	862.5	537.5	256.3	0.0
5°	862.5	537.5	256.3	0.0
2.5°	862.5	537.5	256.3	0.0
0°	862.5	537.5	256.3	0.0

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